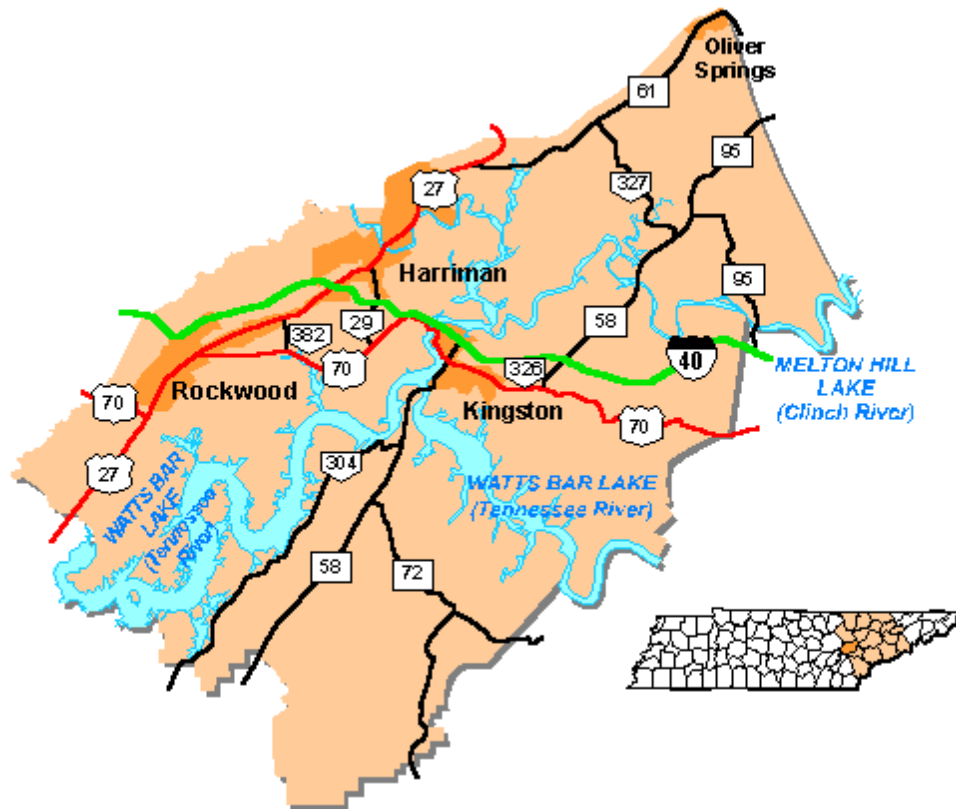


# COMMUNITY DIAGNOSIS

## Status Report



# Roane County

## 1998

TENNESSEE DEPARTMENT OF HEALTH  
EAST TENNESSEE REGIONAL HEALTH OFFICE  
Health Assessment and Planning Division

# Community Diagnosis

**Roane County Health Council – Community Diagnosis Report**  
**Prepared September 1998 by Health Assessment & Planning Division**  
**East Tennessee Regional Health Office**

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## INTRODUCTION

Community Diagnosis is a community-based, community-owned process to identify and address health needs of Tennesseans. As a health assessment and planning process, Community Diagnosis involves:

- ⇒ Analyzing the health status of the community.
- ⇒ Evaluating the health resources, services, and systems of care within the community.
- ⇒ Assessing attitudes toward community health services and issues.
- ⇒ Identifying priorities, establish goals, and determine course of action to improve the health status of the community.
- ⇒ Establishing a baseline for measuring improvement over time.

In each county Community Diagnosis is implemented through the local county health council with support from the East Tennessee Regional Health Office. The Roane County Health Council (RCHC) was established in 1990 to assess the unmet health needs and to plan new programs to improve the health of the citizens of Roane County. A list of council members participating in the assessment can be found in Appendix A.

The RCHC began implementation of the Community Diagnosis process in 1996 by conducting a community survey. This was followed by reviewing various data sets and evaluating resources in the community to identify areas of concern that affect the health of Roane County citizens.

As a result of the assessment process, the health council will develop a health plan for Roane County. The Health Plan will contain goals to improve the health of Roane County residents. Intervention strategies will be developed to deal with the problems identified and a listing of resources needed to implement those strategies.

Benefits of Community Diagnosis for the community included:

- Providing communities the opportunity to participate in directing change in the health services and delivery system.
- Armed with appropriate data and analysis, communities can focus on health status assessment and the development of locally designed, implemented, and monitored health strategies.
- Provide justification for budget improvement requests.
- Provide to state-level programs and their regional office personnel, information and coordination of prevention and intervention strategies at the local level.
- Serve health planning and advocacy needs at the community level. Here the community leaders and local health departments provide leadership to ensure that documented community health problems are addressed.

This document provides a description of the Community Diagnosis activities to-date. Data will be described with emphasis on important issues identified by the council. Summary findings from work done by other organizations will be included.



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## I. COUNTY DESCRIPTION

### A. County Profile

Roane County was created in 1801 from Knox County and Indian lands. The county is named in honor Archibald Roane (1760-1819), a 1796 Constitutional Convention delegate, Superior Court of Law and Equity judge, Supreme Court judge, and governor of Tennessee. Roane County lies in the great valley of the Tennessee River, is 354 square miles in land area, and has a population density of 1,308 persons per square mile. The 1998 estimated population is 49,447 and the projected year 2000 population is 50,007. Roane County is bordered by Morgan County to the North; McMinn and Meigs County to the South; Cumberland County to the West. The county is located 30 miles west of Knoxville and is easily accessible. Though the county is centrally located near major metropolitan areas and within 500 miles of 75% of major U. S. markets, it still contains a small town way of life.

Roane County within in the past 10 years has had 17 new plants locate in the county and the county has seen almost 30 expansions exceeding \$70,000,000 in capital investment. The county is very diverse in its tourist opportunities, it is laced with a network of rivers – the Tennessee, the Clinch, and the Emory. Watts Bar Lake, a 39,000-area reservoir of the Tennessee River, is the center of Roane's water – rich recreation area. Also, Roane County has a rich heritage of Victorian and pre-Civil War Mansions listed on the National Register of Historic Places. With a healthy economy, a rich heritage and diverse recreation opportunities Roane County may be just what you are looking for.

### *Roane County Community Profile*

#### *Location*

Region: East Tennessee  
Square Miles: 354  
Distance from Knoxville: 30 miles

#### *Population (1995 est.)*

County: 47,227  
Male: 22,744  
Female: 24,483  
Minority: 3.8%

#### *Cities/Towns*

Harriman City  
Kingston City, County Seat  
Oak Ridge City (Part)  
Oliver Springs Town (Part)  
Rockwood City

#### *Education*

Roane County School District  
Harriman City School System  
Roane State Community College

#### *Climate*

Annual Average Temperature: 57°  
Annual Average Precipitation: 49"  
Elevation: 875' above Sea Level

#### *Natural Resources*

Minerals: Iron Ore, Coal, Silica, Clay, Gravel  
Timber: Hardwood, Softwood, Yellow Pine, Oak, Hickory, and mixed

### *Roane County Selected Economic Indicators*

#### *Labor Force Estimates*

Total Labor Force: 29,133  
Unemployment: 1,669 (5.1% of labor force)  
Unemployment Rate: 5.8

#### *Tax Structure*

County Property Tax Rate per \$100: \$3.18

*Per Capita Income (1994): \$17,525*

### ***Health Care Resources***

	<b>County</b>	<b>Region</b>	<b>State</b>
Persons per Primary Care Physician	2,188	1,776	1,053
Persons per Nurse Practitioner	15,314	7,429	7,134
Persons per Physician Assistant	4,994	15,053	18,664
Persons per Registered Nurse	148	178	106
Females 10-44 per OB/GYN	211	4,509	2,100
Persons per Dentist	10,673	2,414	1,853
Persons per Staffed Hospital Bed	2,418	491	245
Percent occupancy in community hospitals	282	57.3	57.7
Person per Staffed Nursing Home Bed	97	119	135
Percent occupancy in community nursing homes	96.7	96.4	93.6
Physician shortage area for OB	NO		
Physician shortage area for Primary Care	YES		

*Note: Manpower data are 1996; shortage areas, 1995, facilities, 1994.*

#### ***Hospitals***

Roane Medical Center—109 beds

#### ***Nursing Homes***

Johnson Health Care Center, Harriman—180 beds

Marshall C. Voss health Care Facility, Harriman—140 beds

Rockwood Health Care Center, Rockwood—157 beds

## **B. County Process—Overview**

### ***The Assessment Process***

The Tennessee Department of Health has made a strong commitment to strengthening the performance of the public health system in performing those population-based functions that support the overall health of Tennessee's assessment, assurance and policy development.

Community Diagnosis is a public-private partnership to define the county's priority health problems and to develop strategies for solving these problems. The Roane County Health Council in collaboration with the East Tennessee Regional Health Office conducted an extensive assessment of the status of health in Roane County. The health council contains community representatives from various geographic locations, social-economic levels, and ethnic groups. An extensive amount of both primary and secondary data were collected and reviewed as the first step in the process. Major issues of concern identified by the community were perception and knowledge of health problems, which were important factors in analyzing the data. Council members identified major issues of concern and each issue was then ranked according to size, seriousness, and effectiveness of interventions (Table 15).

### ***Resources***

A focus will be placed on identifying existing resources. Cooperation of various agencies could allow redirection of such resources to target identified priorities. Additional resources will be sought for the development of intervention and implementation strategies identified by the health council.

## II. COMMUNITY NEEDS ASSESSMENT

### A. Primary Data

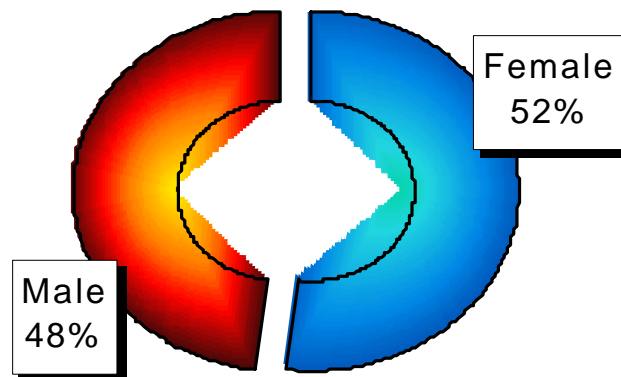
#### 1. *The Community Stakeholder Survey*

The stakeholder survey provides a profile of perceived health care needs and problems facing the community and stakeholders who respond to the survey. Stakeholders are those individuals in a community who have a special interest in a particular issue or action being taken. The survey includes questions about the adequacy, accessibility, and level of satisfaction with health care services in the community. Members of the council were asked to complete the stakeholders' survey as well as to identify and obtain comments from other stakeholders in the community. The Community Stakeholder Survey is not a scientific random sample of the community; rather, its purpose is to obtain subjective data from a cross section of the community about health care services, problems, and needs in the county. It is one of two sources of primary data used in community diagnoses.

The Roane County Stakeholder Survey was distributed to various individuals across the county. The stakeholders represent a cross section of the community, i.e., young families, single parents, the elderly, business leaders, consumers, rural residents and urban residents. The stakeholders include both the users and providers of health services.

There were 52 respondents to the Roane County Community Survey. Of the 52 respondents, 48.1% were male and 51.9% were female.

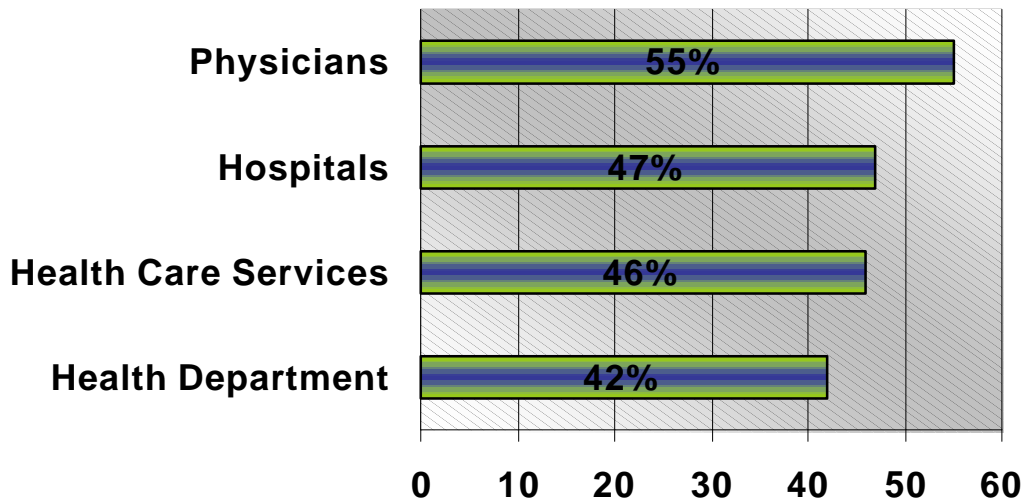
Table 1



Seventy-three of the respondents had lived in the county for twenty or more years. Respondents were asked to rate various health services as very adequate or very satisfied, adequate or satisfied, available but not adequate, available but no opinion on service, or not available. Forty-seven percent of the respondents rated the community health care services as very adequate or adequate and thirty-one percent respondent that services were available but not adequate. Over fifty percent of the respondents were either very satisfied or satisfied with the physician services in their community and forty-eight percent were either very satisfied or satisfied with the hospital services in their community. Only forty-two percent of the respondents were very satisfied or satisfied with the local health department services and thirty-four percent of no opinion regarding the health department services (Table 2).

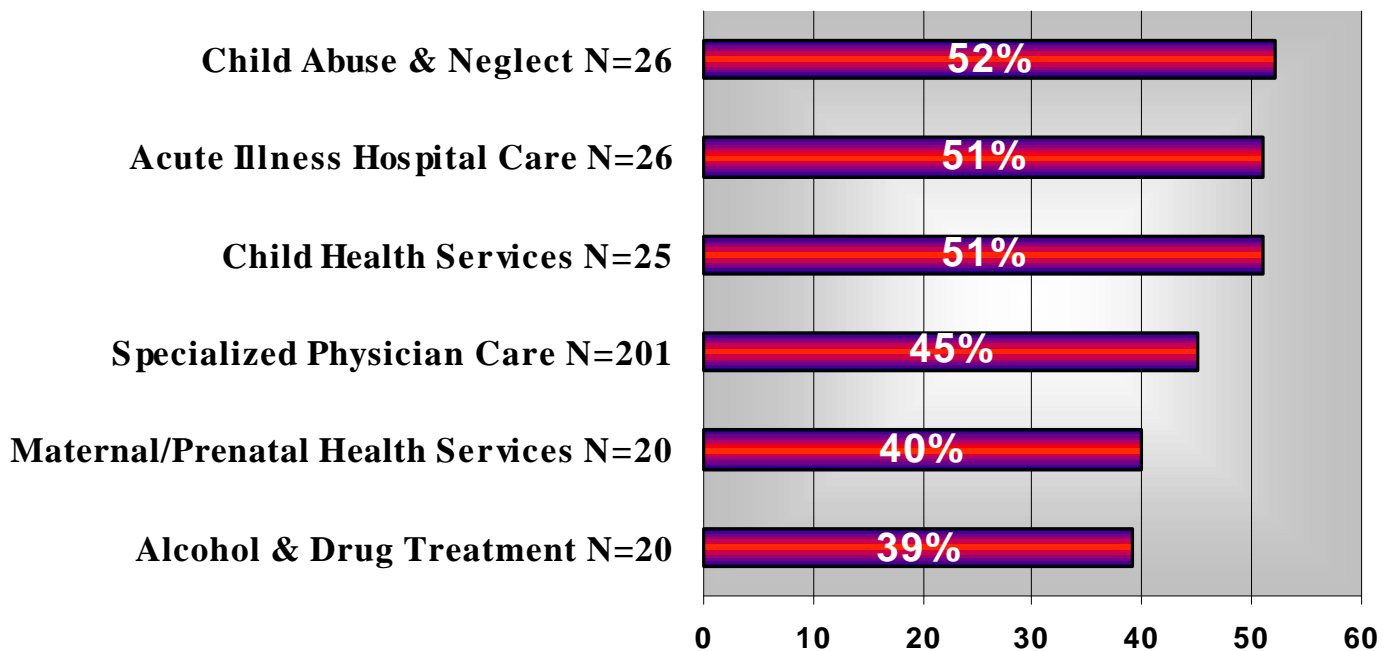


**Table 2**  
**Community Health Care services Satisfaction**  
**% Responding Very Satisfied or Satisfied**



Data that concerned the health council were the ratings of “not adequate” in the community health services category. Over 50% of the respondents felt that services for child abuse and neglect were available in the community but not adequate to address the issue. The top five services that were ranked as available but not adequate also include acute illness hospital care, child health services; specialized physicians care, maternal/prenatal health services, and alcohol and drug treatment.

**Table 3**  
**Communit Health Care Services**  
**Most “Not Adequate” Responses**



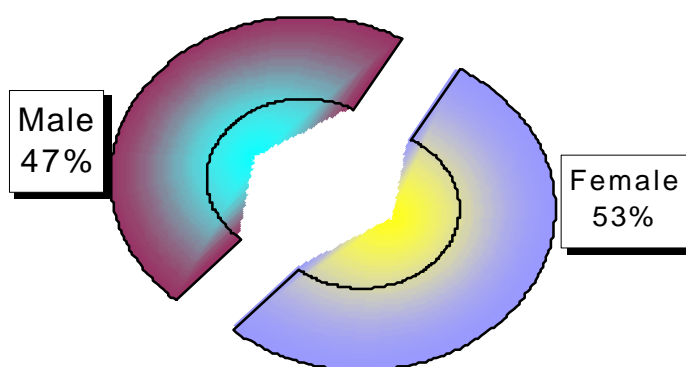
## 2. Behavioral Risk Factor Survey (BRFS)

The BRFS is a randomly selected representative sample of the residents of the county. The survey that was used is a telephone interview survey modeled after the BRFS survey conducted by the Centers for Disease Control. The BRFS collects information from adults on health behaviors and preventive practices related to several leading causes of death such as chronic diseases, injury, and HIV infection.

Adults are randomly selected using random digit-dialed telephone surveys and are questioned about their personal health practices. In addition they were asked to rate various community health issues. A Likert scale was used with respondents identifying issues as a definite problem, somewhat a problem, not a problem, or not sure.

A sample size of 200 was collected from Roane County. This allowed estimates of risk factors to be made for the county. The overall statistical reliability is a confidence level of 90,  $\pm$  6%. Of the respondents 53% were female and 47% male (Table 4). This compares to 52% female and 48% male for the population of Roane County based on the 1990 census.

Table 4



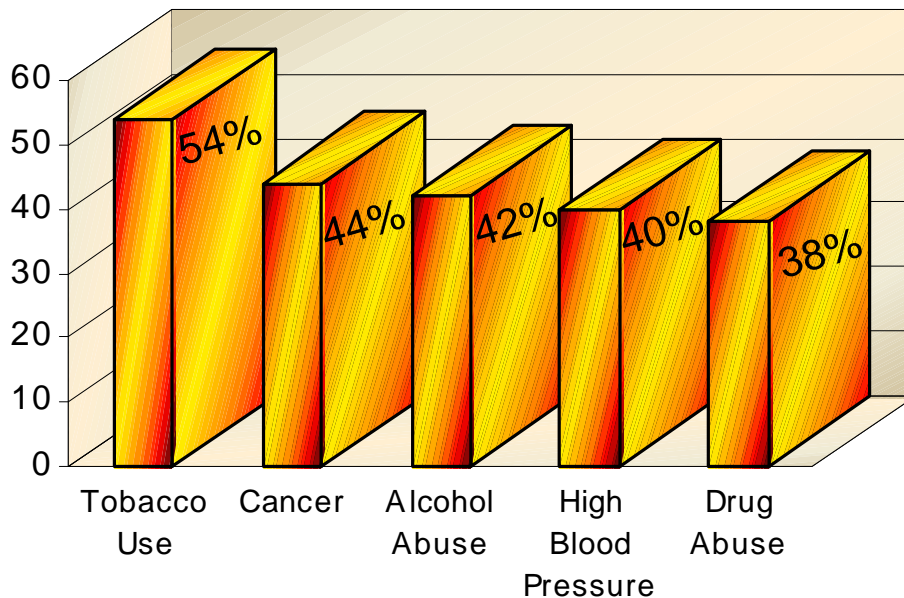
After a review of the data from the BRFS, the council divided the information into three areas. The first area is personal health practices. Five key factors were identified as concerns for the health of the overall community. These issues were then compared to Healthy People: 2000. Table 5 lists the practices of concern with the Year 2000 goal for the nation.

Table 5

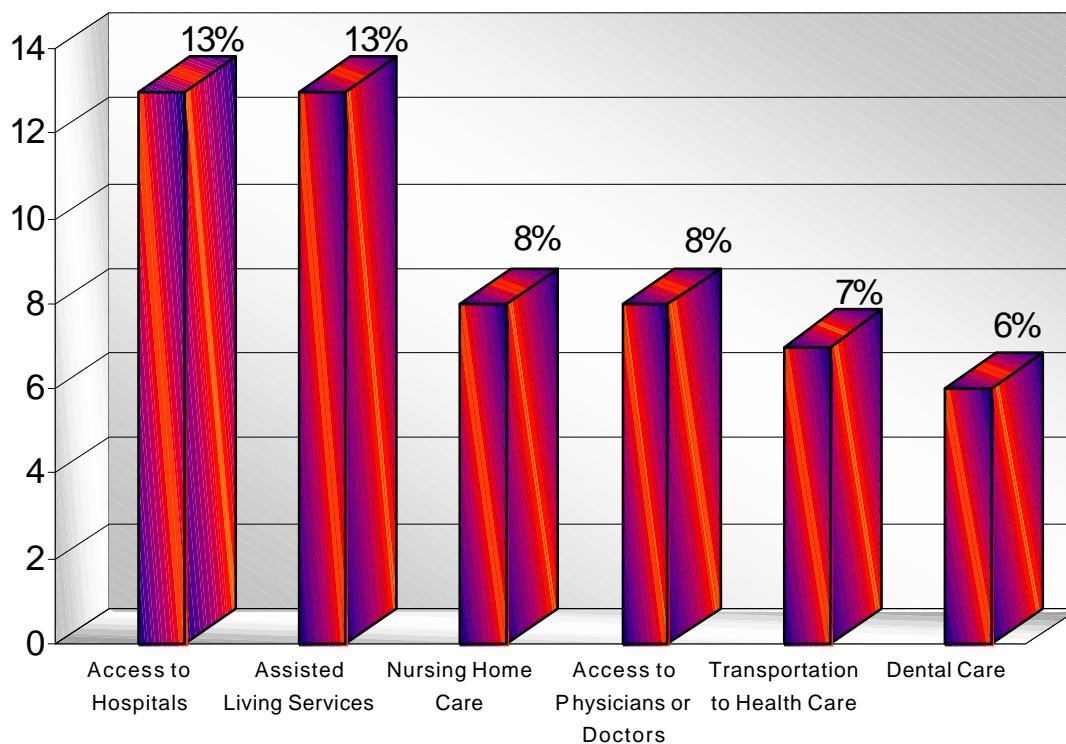
Reported Health Practices	BRFS % of Respondents	Year 2000 Goal
High Blood Pressure)	27%	(No Goal)
Smoking (currently smoke)	38%	15%
Women reported that it had been > 2 years since their last pap smear	20%	(No Goal)
Mammogram (had mammogram)	64%	80%
Advised to Lose Weight	20%	(No Goal)

The opinion data collected by the BRFSS on community issues was divided into two categories: 1.) Community Problems and 2.) Access to Health Care. The top issues in the areas are identified in Tables 6a&b.

**Table 6a**  
**Community Problems**  
**Percentage Saying “Definite Problem”**



**Table 6b**  
**Access to Health Care Problems**  
**Percentage Saying “Definite Problem”**



## B. Secondary Data

Information on the health status, health resources, economy, and demographics of Roane County is essential for understanding the existing health problems in the community. The health council received an extensive set of data for the county which showed the current health status as well as the available health resources. The secondary data (information already collected from other sources for other purposes) was assembled by the State Office of Assessment and Planning. Data sets that are routinely collected by the Department of Health as well as other state departments and agencies were assembled and distributed to health council members. Socio-economic information was obtained from the Department of Economic and Community Development as well as information put together by the Tennessee Commission on Children and Youth in their "Kid's Count" report.

Various mortality and morbidity indicators covering the last 12 years were presented for the county, region, and state. Trend data were presented graphically using three-year moving averages. The three year moving averages smooth the trend lines and eliminate wide fluctuations in year-to-year rates that distort true trends.

Another section of secondary data included the status of Roane County on mortality and morbidity indicators and compared the county with the state, nation and Year 2000 objectives for the nation.

Issues identified by the council from all secondary data were selected primarily on the comparison of the county with the Year 2000 objectives. The issues identified were:

- 1. Cancer
- 2. Lung Cancer
- 3. Motor Vehicle Accidents
- 4. Prenatal Care
- 5. Teen Pregnancy
- 6. Senior Issues

\*It was noted that over 25% of the households are over the age of 65. Occupancy rate of the local nursing home was 96.7%.

**Table 7**  
**Total 1996 (est.) Population: 45,942**  
**Total Number of Households: 18,453**

	County	Region	State
Percent of households that are family households	75.7	76.3	72.7
Percent of households that are families headed by a female with no husband present	9.9	10.6	12.6
Percent of households that are families headed by a female with no husband present and with children under 18 years	5.0	5.4	6.9
Percent of households with the householder 65 and up	25.3	23.6	21.8

**Table 8**  
**Education**

	County	Region	State
Number of persons age 25 and older	31,943	365,673	3,139,066
Percent of persons 25 and up that are high school graduates or higher	66.	60.8	67.1
Percent of persons 25 and up with a bachelor's degree or higher	13.2	11.1	16.0

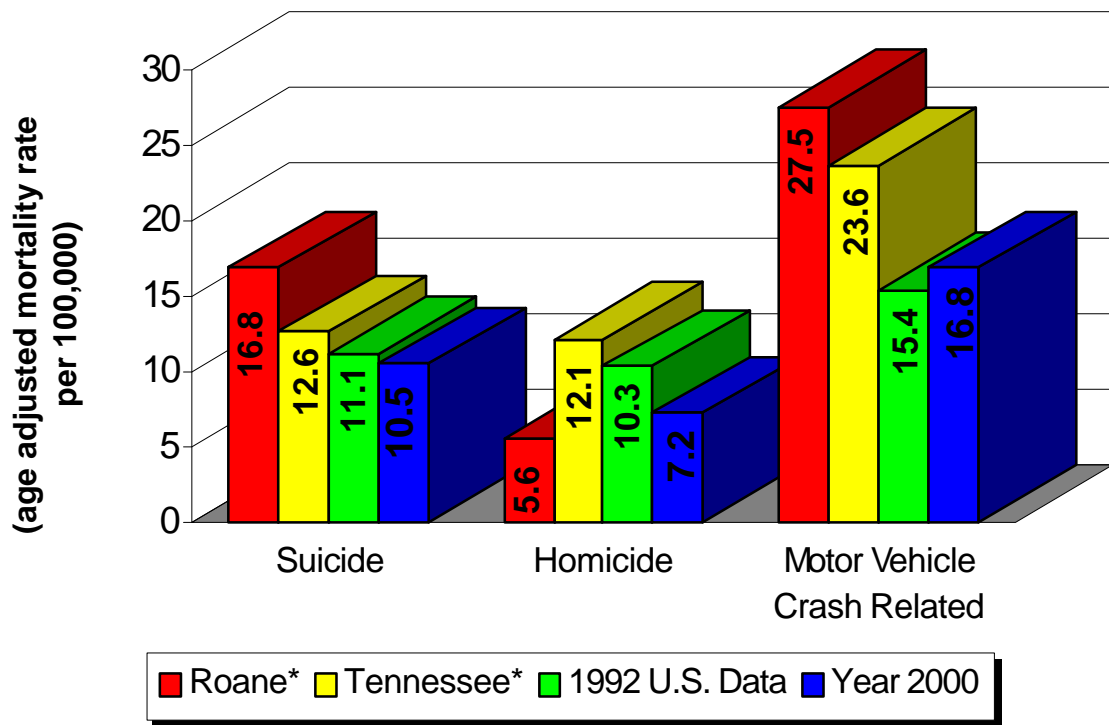
**Table 9**  
**Employment**

	County	Region	State
Number of persons 16 and older	37,581	437,649	3,799,725
Percent in work force	59.5	60.1	64.0
Number of persons 16 and older in civilian work force	22,290	262,392	2,405,077
Percent unemployed	9.5	7.8	6.4
Number of females 16 years and older with own children under 6	2,467	30,082	287,675
Percent in labor force	53.7	57.4	62.9

**Table 10**  
**Poverty Status**

	County	Region	State
Per capita income in 1989	12,015	\$10,756	\$12,255
Percent of persons below the 1989 poverty level	16.0	17.1	15.7
Families with children under 18 years, percent with income in 1989 below poverty level	20.1	22.3	20.7
Percent of persons age 65 years and older with income in 1989 below the poverty level	20.9	21.1	20.9

**STATUS OF ROANE COUNTY ON SELECTED YEAR 2000 OBJECTIVES  
AGE ADJUSTED MORTALITY RATE PER 100,000 POPULATION**



\*Figures for Tennessee and Roane Co. (Tables 11a & 11b) are a 3-Year Average from the years 1991-1993.

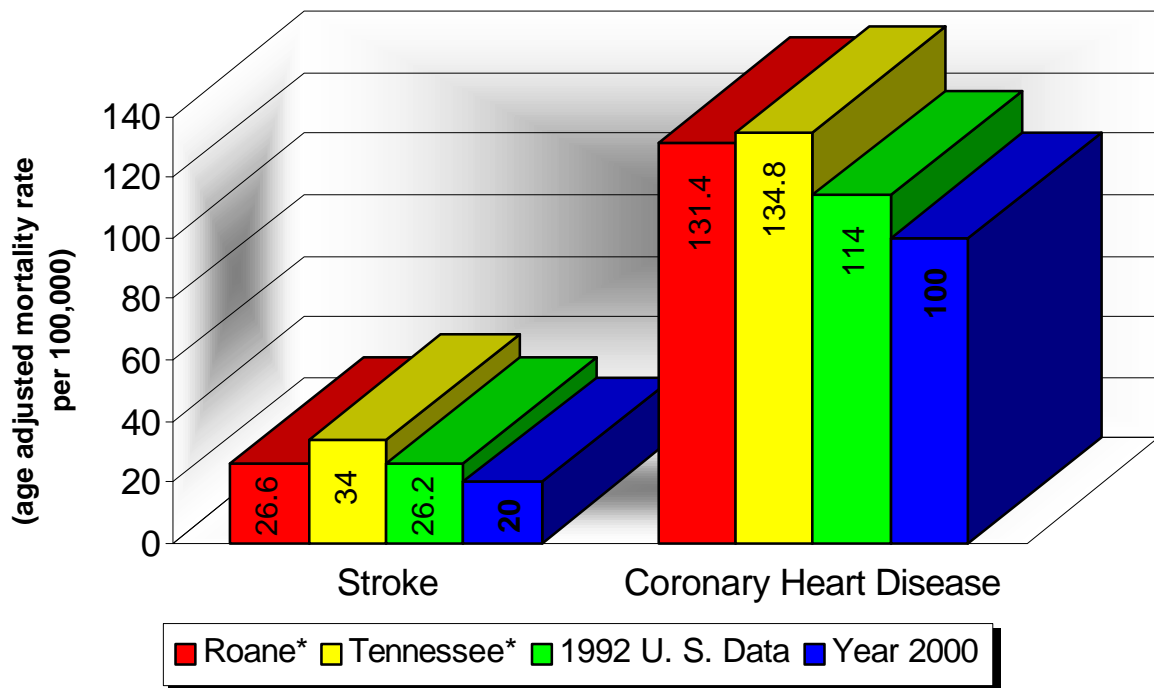
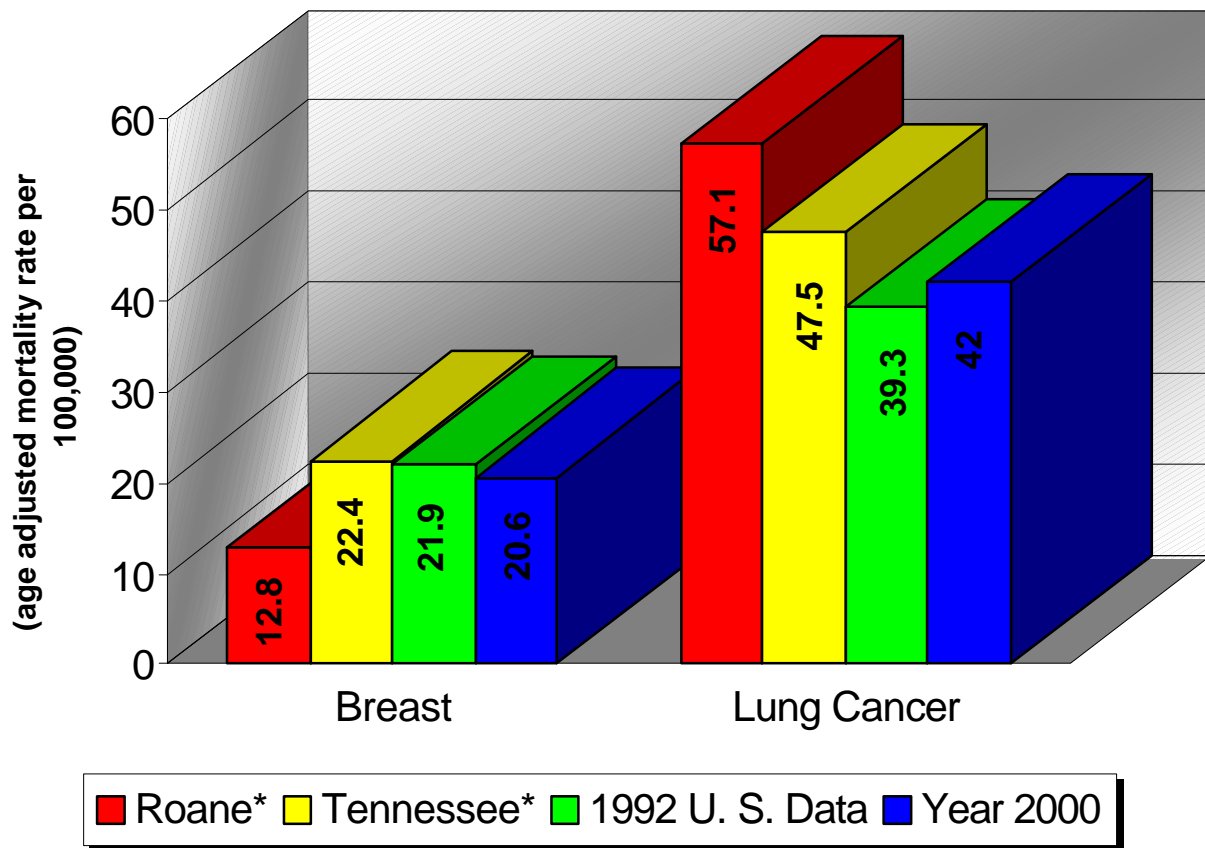


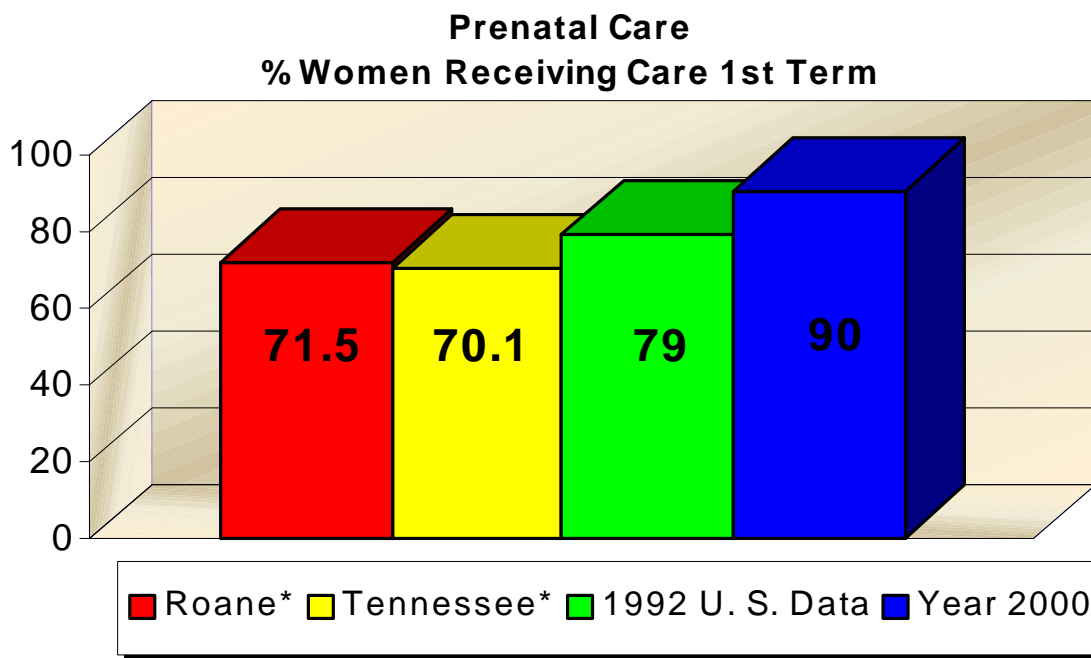
Table 12

**STATUS OF ROANE COUNTY ON  
SELECTED YEAR 2000 OBJECTIVES  
AGE ADJUSTED MORTALITY RATE  
PER 100,000 POPULATION**



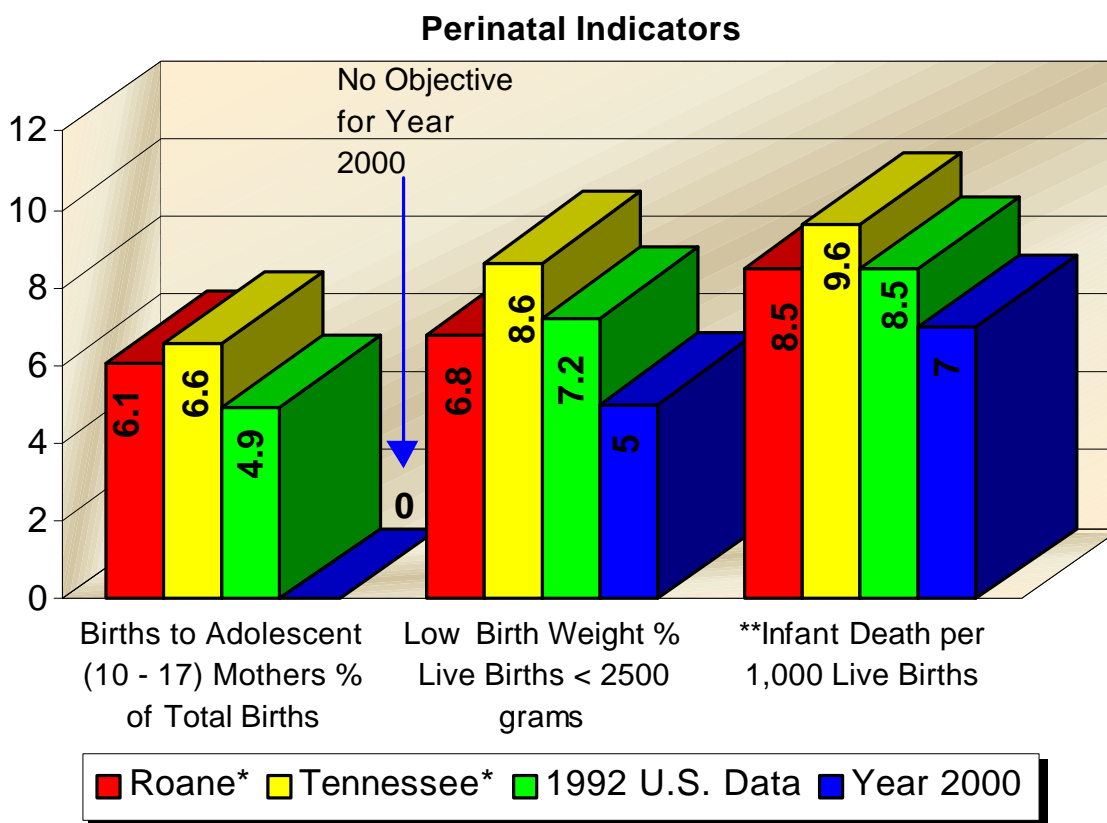
**\*Figures for Tennessee and Roane Co., Breast and Lung Cancer are a 3-year average from the years 1991 –1993.**

# STATUS OF ROANE COUNTY ON SELECTED YEAR 2000 OBJECTIVES PERINATAL INDICATORS



\*Figures for Roane County are a 2-year average from the years 1992 – 1994.

\*Figures for Tennessee and Roane County are a 3-year average from the years 1991 – 1993.



\*\*Figures for Infant Death per 1,000 live births.



### **III. HEALTH ISSUES AND PRIORITIES: IDENTIFICATION AND PRIORITIZATION**

At the conclusion of the review of all data from the Community Diagnosis process and other sources, the Roane County Health Council identified key health issues. A second step was taken to collect more specific data as it related to each of these issues. The health council then ranked each issue according to size, seriousness, and effectiveness of intervention. A final overall ranking was then achieved. Table 15 indicates the health issues in rank order.

**Table 15**

#### **ROANE COUNTY HEALTH ISSUES PRIORITIES**

- **1. HEALTH EDUCATION**
- **2. TEEN PREGNANCY**
- **3. PRENATAL CARE**
- **4. CANCER**
- **5. SUBSTANCE ABUSE**
- **6. SAFETY (SEAT BELTS, CHILD SEATS)**
- **7. SENIOR ISSUES**
- **8. SPECIALTY CARE**
- **9. PHYSICIAN CARE**
- **10. DENTAL CARE**

### **IV. FUTURE PLANNING**

The Health Planning sub-committee is charged with developing a Roane County Health Plan. This plan will contain prioritized goals which will be developed by the health council along with proposed intervention strategies to deal with the problems identified and a listing of resources needed to implement those strategies.

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# APPENDIX A

## APPENDIX A

### A. Roane County Health Council

<i>Jerry Stephens</i>	<i>Chairperson, Roane County Health Council President, AGA Insurance, Inc.</i>
<i>Alven Brogdon</i>	<i>Community Representative</i>
<i>Kathleen Cole</i>	<i>Community Representative</i>
<i>Charles Flora III</i>	<i>Harriman Utilities</i>
<i>Jim Gann</i>	<i>Administrator, Roane Medical Center</i>
<i>George Lockett</i>	<i>Attorney, Retired</i>
<i>Barbara Neal</i>	<i>Teacher, Roane State Community College</i>
<i>Stephen Oran</i>	<i>Roane Medical Center</i>
<i>Joan Parish</i>	<i>Roane County Health Department</i>
<i>Bert Pemberton</i>	<i>Community Representative</i>
<i>Roger Rule</i>	<i>Comcast Cable</i>
<i>Bill Taylor</i>	<i>911 Emergency Services</i>
<i>Rev. Garvin Walls</i>	<i>Pastor, Mt. Pisqah Baptist Church</i>
<i>Gloria Wright</i>	<i>Emergency Medical Services</i>

### B. Health Information Tennessee (HIT)

The Tennessee Department of Health and The University of Tennessee Community Health Research Group developed Health Information Tennessee (HIT) a web site that was developed in conjunction with the Health Status Report of 1997 to make health related statistical information pertinent to Tennessee available on the Internet. This web site not only provides an assortment of previously calculated health and population statistics, but also allows users an opportunity to query various Tennessee health databases to create personalized charts and tables upon demand. The health data is continually being expanded and updated. You may visit this web site at the following address **[www.server.to/hit](http://www.server.to/hit)**.

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≥For more information about the Community Diagnosis assessment process, please contact council members or the East Tennessee Health Assessment and Planning Staff at (423) 546-9221.

